

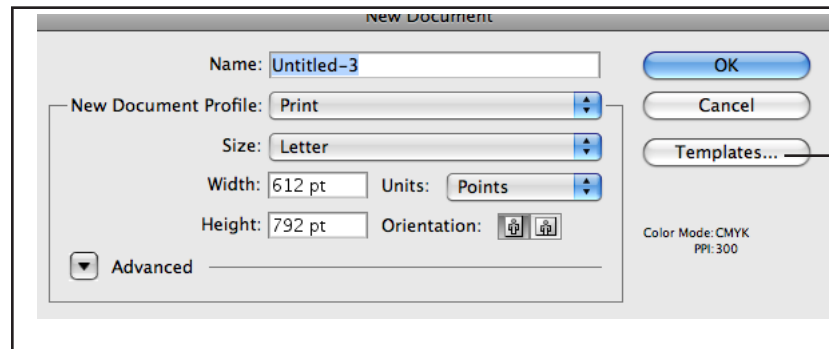
# **Adobe Illustrator**

## **Introduction**

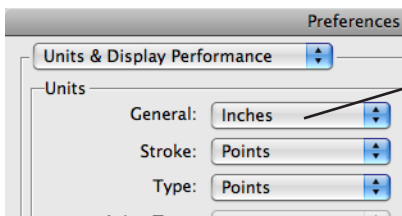
# Getting Started

## Creating a new document

Choose File> New...



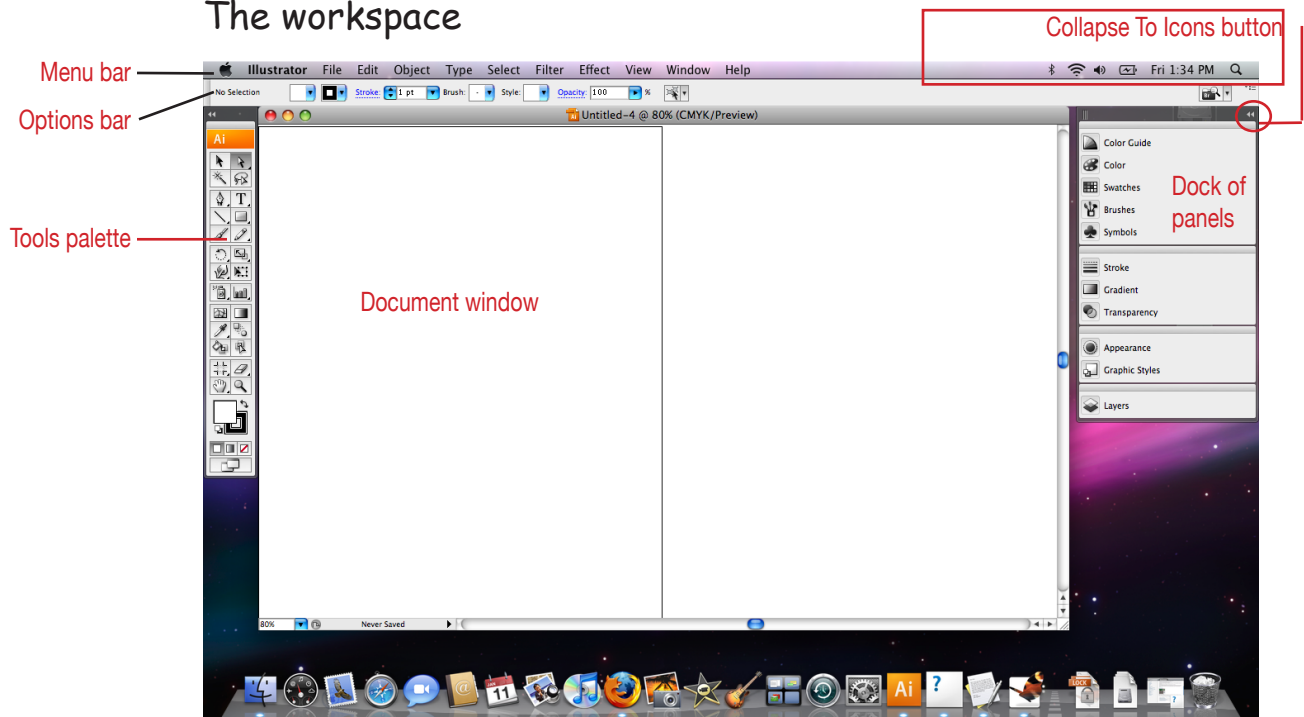
Check out the myriad of templates



## Changing the Default Preferences from points to inches

Before you start a new document, choose Illustrator > Preferences > Units & Display Performance..., and change the General option from points to inches. With no document open, all subsequent documents you start will be in inches.

## The workspace



Menu bar: commands under menus.

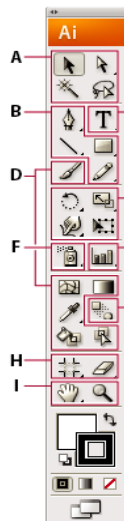
Tools panel: tools for creating and editing. Similar tools are grouped.

Control panel: options for the currently selected tool are shown.

Document window: displays what you're working on.

Panels: floating palettes that can be accessed from the Window menu and can be grouped, stacked, or docked.

# Tools



## A Selection tools

- **Selection (V)**
- **Direct Selection (A)**
- **Group Selection**
- **Magic Wand (Y)**
- **Lasso (Q)**

## B Drawing tools

- **Pen (P)**
  - Add Anchor Point (+)
  - Delete Anchor (-) Point
  - Convert Anchor Point
- **Line Segment (\\)**
  - Arc
  - Spiral
  - Rectangular Grid
  - Polar Grid
- **Rectangle (M)**
  - Rounded Rectangle
  - Ellipse (L)
  - Polygon
  - Star
  - Flare
- **Pencil (N)**
  - Smooth
  - Path Eraser

## C Type tools

- **Type (T)**
  - Area Type
  - Type On a Path
  - Vertical Type
  - Vertical Area Type
  - Vertical Type On a Path

## D Painting tools

- **Paintbrush (B)**
- **Mesh (U)**
- **Gradient (G)**
- **Eyedropper (I)**
  - Measure
- **Live Paint Bucket (K)**
- **Live Paint Selection (Shift+L)**

## E Reshaping tools

- **Rotate (R)**
  - Reflect (O)
- **Scale (S)**
  - Shear
  - Reshape
- **Warp (Shift-R)**
  - Twirl
  - Pucker
  - Bloat
  - Scallop
  - Crystallize
  - Wrinkle
- **Free Transform (E)**
- **Blend (W)**

## F Symbol tools

- **Symbol Sprayer (Shift+S)**
- **Symbol Shifter**
- **Symbol Scruncher**
- **Symbol Sizer**
- **Symbol Spinner**
- **Symbol Stainer**
- **Symbol Screener**
- **Symbol Styler**

## G Graph tools

- **Column Graph (J)**
  - Stacked Column Graph
  - Bar Graph
  - Stacked Bar Graph
  - Line Graph
  - Area Graph
  - Scatter Graph
  - Pie Graph
  - Radar Graph

## H Slicing and cutting tools

- **Crop Area (Shift+O)**
  - Slice (Shift+K)
  - Slice Select
- **Eraser (Shift+E)**
  - Scissors (C)
  - Knife

## I Moving and zooming tools

- **Hand (H)**
- **Page**
- **Zoom (Z)**

■ Indicates default tool \* Keyboard shortcuts appear in parenthesis

Open path



Closed path



To close the path of an object created with the pen tool, click on your first anchor point.

### Teaching tip:

Students often use the pencil or straight line tool to draw an object and want to fill it with the paint bucket, but Illustrator only fills closed paths.

## Selection tools:

Black Arrow selects all of the anchor points in an object or group.

White Arrow can be used to select specific points in an object or group.

## Drawing tools:

The Pen tool creates straight and curved paths. A path must be closed in order to fill correctly. Hold shift and click to get straight lines; click and drag to make Bezier curves.

The Shape tools are the easiest way to draw in Illustrator. Hold the shift key to get a square or circle.

Hold the option key to start drawing from the center of the shape.



**Assignment:** here's a fun way to teach students how to use the tools design professionals use most; the shape tools and the pen tool. Choose Applications > Photo Booth and take a picture of yourself. Start a new document in Illustrator and choose File > Place, and place your picture. You'll find your picture in Pictures > Photobooth. Choose Object menu > Lock to lock your image in place. Start with the backmost shape and use the shape and pen tools to draw your self portrait.

## Drawing tools, continued:



The Paintbrush and Pencil tools can add lines and brush strokes to the top of a drawing. Choose Window > Brush libraries to load a huge array of brushes. The smooth tool can smooth out pencil lines.

Use the Line tool when you want straight lines.

## Color

### Color modes: Window > Color

Click on the tab of the color panel and drag it out to undock it. Click on the right arrow at the top right corner of the Color panel to change the mode.

RGB: red, green, blue – use for web projects or projects that will be viewed on a monitor.

CMYK: cyan, magenta, yellow, and black. Use for projects that will end up at a printing press.

*\*Note: in CMYK mode, the filters that students love to use will be grayed out.*

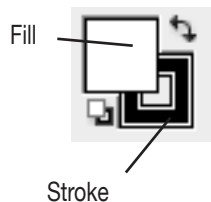
### Swatches: Window > Swatches

You will see the default panel of swatches. Choose Window > Swatch Libraries to load other swatches.

If you make a color you'd like to add to the swatches, select it in the stroke or fill tools and drag and drop it into the swatches.

### Stroke and Fill

Select an object with the black arrow, click on the fill button, and choose a swatch from the swatches menu to fill your object. To outline your object, make sure it is selected, and choose the stroke button. You can choose a color for the stroke in the color or swatch panels. Use the Stroke panel to find more options for outlining, including corner treatments, width and dashed lines.



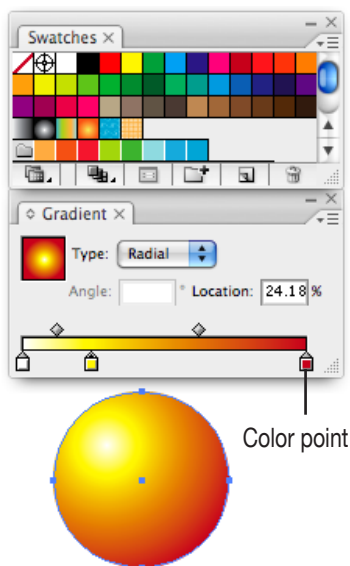
## Gradients

Draw a circle with the oval tool and click on a gradient in the swatches panel to fill with a gradient.

Draw over your object in different directions with the gradient tool. 

Use the Gradient Panel to change the color. Drag a swatch over a color point in the Gradient panel to change color. Click to add new color points. To delete a color point, click on it and drag it off the gradient.

You can save a gradient by selecting an object filled with the gradient you want, and dragging it from the fill tool to the Swatches panel.



## Selecting Objects

### Selecting grouped objects

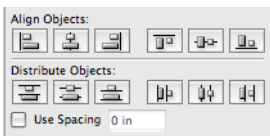
To select a group of objects with one click, first select each object by holding down the shift key, and then choose Object > Group.

### Options in the Select Menu

Select all, selects all objects in document.

Select Inverse selects the exact opposite of what you currently have selected.

Select, same... allows you to select objects based on their fill and stroke. Very handy in making global changes to color.

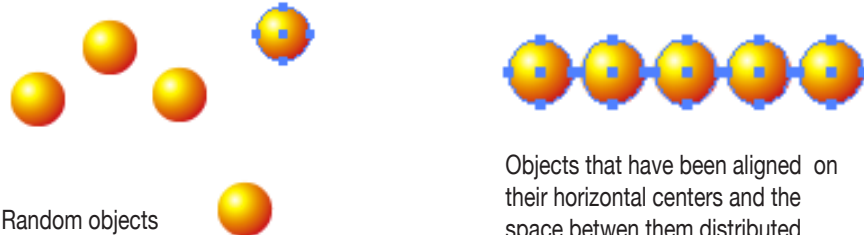


## Aligning and Distributing objects

### Align

A group of objects can be selected and aligned left, right, or center; horizontally or vertically.

Choose Window > Align, and select the type of alignment you want



### Distribute

You can also distribute space between a group of objects in the Align panel, between top edges, centers horizontally or vertically, bottom edges, left edges or right edges.

## Arranging, Locking and Hiding objects

### Arranging

Every object you draw is on a sublayer on top of the last object you drew. If you want an object to appear in front or in back of another, choose Object > Arrange > Bring to Front or Send to Back.

### Locking

If you want to draw over an object, or just don't want it to move or select, you can select it and choose Object > Lock > Selection.

### Hiding

If you want to select an object that is obscured by another object, choose, Object, Hide Selection.

## Duplicating Objects: 2 ways

1. Select the object and choose Edit > Copy, then Edit > Paste or Command C and Command V.
2. Select the object. Begin to drag the object, hold down the option key. Move the object where you want it while holding down the Option key, let go of the mouse, then let go of the option key.

## Transforming Objects



Scale Shear Reshape Rotate Reflect

### Scale

Select an object, then select the scale tool. Move your cursor off the selected object and drag the mouse to resize it. Hold down the shift key to resize proportionally. Hold down the option key to make a copy while you resize.

Select an object, get the scale tool, hold down the Option key and click to get a dialog box where you can type in a percentage. You can also choose a non-uniform scale, and to scale stroke widths and effects.

### Rotate

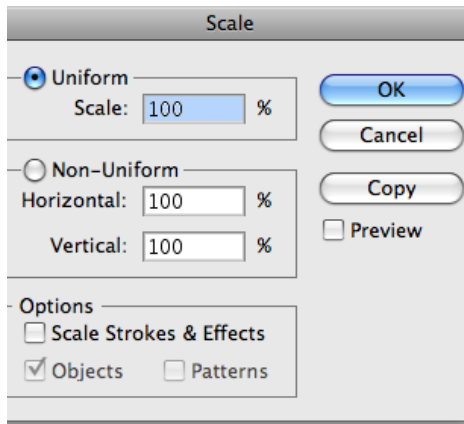
Works the same as the Scale tool but rotates objects around a point. Wherever you click after selecting the rotate tool sets the point of rotation.

### Shear

Rotates and shears at the same time.

### Reflect

Mirrors an object horizontally or vertically. You don't have to draw the whole thing, just draw half and reflect it!



Type on a Path



Type Area type Vertical type

## Type

### Point type

Select the type tool, click, and start typing in one line.

### Area type

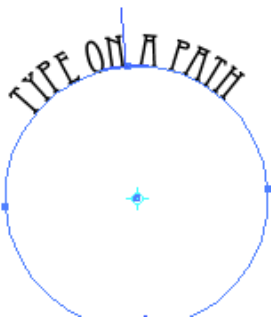
Select the type tool and draw a bounding box to constrain your type inside.

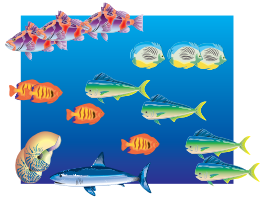
### Type on a path

Select a curved line or shape, choose the Type on a Path tool, click on an anchor point, and type. Select your text with the Type on a Path tool to format the font, color, size, etc.

### Vertical type

The vertical type, vertical area type, and vertical type on a path tools work much like the ones described above.





## Symbol sets

You can make mixed sets of symbol instances by using the Symbol Sprayer tool with one symbol and then using it again with another symbol.

### Artwork created with the symbolism tools

As you work with symbol sets, keep in mind that the symbolism tools affect only the symbol or symbols selected in the Symbols panel.

## Help

Use the video tutorials under the Help menu for a quick brush-up. Or, you can search the help menu for a specific answer.

Many districts have a license to use Atomic Learning ([atomiclearning.com](http://atomiclearning.com)). These one minute tutorials can get you a quick answer,

## Illustrator Projects

### Target logo

Using the ellipse tool and holding down the shift and option keys, draw the biggest circle in the back of the logo. Repeat by putting in alternating white and red circles. Type the word TARGET in Arial Black. Select the word with the black arrow tool and under the Type menu, choose Create outlines. This is an important step because if your client didn't have the font on his or her computer, it would not display correctly.

### Rosette

A teacher I worked with who carved rosettes into wood asked me if I had anything that could help her draw them faster and get them the right size. We did this in about 10 minutes.

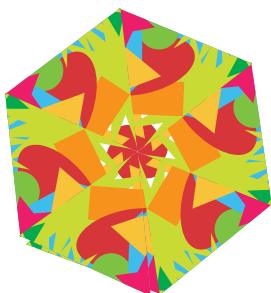
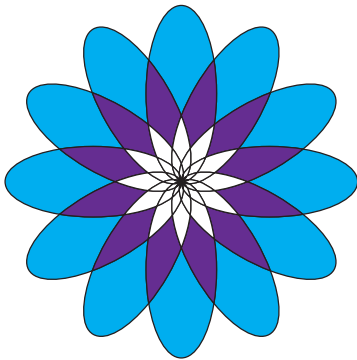
Use the ellipse tool to draw an oval. Select the oval, then choose the rotate tool, hold down the Option key, and click the bottom anchor point in the oval. (After you select the rotate tool, the next point you click on will set the point of rotation, and holding down Option brings up a dialog box that you can specify a specific angle of rotation.

Type 30 in for degrees and click Copy. The rosette is rotated and copied. You can select the Object Menu, Transform, Transform Again (or Command-D) to finish rotating the ovals.

Select the rosette with the black arrow tool. Under the Window menu, choose Pathfinder. Option click the divide tool. This allows you to select individual shapes within the rosette with the white arrow tool, and fill them with color.

### Kaleidoscope

Draw a pile of little shapes of different colors using the shape tools. Fill the shapes, but don't stroke them. Group the shapes. Draw a triangle about the same size as the pile of shapes by using the polygon tool, holding down the mouse and clicking the down arrow key until you have a triangle. Keep holding down the mouse, and select the shift key to get an equilateral triangle. Place



the triangle over the shapes and under the Object menu, choose Clipping Mask, Make. You should only see the shapes inside the triangle. Select an open end-point of your triangle with the black arrow tool. Get the Rotate tool, and hold down the option key as you click on the corner point of the triangle. Type in 60° in the dialog box for rotation, and select the Copy key. Your triangle of shapes will rotate and copy at the same time. Under the Transform menu, choose Transform Again, and notice that the keyboard command is Cmd-D. Hit Cmd-D until you have a completed kaleidoscope.

## Graph

<http://mediadesigner.digitalmedianet.com/articles/viewarticle.jsp?id=31554-1> is an excellent tutorial on making a 3d graph.



### General graph creation

Select a graph tool.

The tool you use initially determines the type of graph Illustrator generates; however, you can easily change the type of graph later on.

Define the dimensions of the graph by dragging a box the size you want your graph to be.

Enter data for the graph in the Graph Data window.

*Important: Graph data must be arranged in a specific order, which varies by graph type. Before you start to enter data, be sure to read about how to organize labels and data sets in the worksheet.*

Click the Apply button (the check icon).

The Graph Data window stays open until you close it. This allows you to easily switch between editing graph data and working on the artboard.

## Resources

The help menu in Illustrator

Adobe.com video tutorials

Google Illustrator tutorials and search until you find an interesting one